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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,994	11/12/2001	Randy B. Osborne	042390.P12472	6491

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EXAMINER

INOA, MIDYS

ART UNIT	PAPER NUMBER
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2188

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/010,994

Applicant(s)

OSBORNE, RANDY B.

Examiner

Midys Inoa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on September 22nd, 2003 has been considered by the examiner.

Drawings

2. The drawings are objected to because figure ¹⁹~~18~~ is completely missing and figure ²⁰~~19~~ is partially missing. Applicant has provided space and labels for these figures however, no figures have been provided. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "read request within a write packet" of claims 2, 11, and 14 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claim 7 objected to because of the following informalities: On line 8, "a processor having an memory output" should be -- a processor having a memory output --. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 2, 11, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear how or in what format a read request can be issued within a write packet.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 3-10, 12-13, and 15-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Dahl et al. (6,266,747).

Regarding Claims 1, 3, 10, 13, and 16 Dahl et al. discloses a computer system employing a read priority system so that read requests, even when received after write requests, are giving priority over the write requests ("preempting write data with the read request", Column 2, lines 48-60).

Regarding Claims 4, 12, 15, 16, and 18 the read request and write requests being issued by the system of Dahl et al. operate under the control of an Instruction Processor Unit 14 which serves as their layer controller (Column 2, lines 60-67). The Instruction Processor Unit 14 is also the control basis under which the read priority system operates; therefore, the process of

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prioritizing (“preempting”) a read request over a write request is dependent on control data coming from the Instruction Processor Unit and its Instruction Queue Controller 18.

Regarding Claims 5-6, the write and read requests of the system of Dahl et al. works for all types of write requests and read requests. Therefore, the read requests can be memory write requests, device write requests, or configuration write requests and the write requests can be memory read requests, device read requests, or configuration read requests

Regarding Claims 7 and 23, Dahl et al. discloses a computer system employing a read priority system, which, like most computer systems employs the use of an instruction processing unit 14 (“processor”), a data storage unit 16 (“memory”), and an instruction queue controller 18 (“processor controller”). Since the communication of these controllers is imperative for the system’s function, memory and processor ports are provided in order to provide inputs from the memory to the processor, inputs from the controller to the processor, inputs from the processor to the memory and inputs from the controller to the memory (Figure 1).

Regarding Claims 8 and 24, the system of Dahl et al. controls the read priority system through the use of an instruction processing unit 16 and its instruction queue controller 18. These components provide the protocol that allows for the read priority to take place (“protocol allowing ...write request to be preempted by a processor read request”, Column 2, lines 60-67)

Regarding Claim 9, the system of Dahl et al. is used in a telephony network (Column 2, lines 48-59). Networks tend to transmit data in data packet format. These packets have headers, which include vital information about the data or the request being transmitted. The headers may include information such as payload or control information.

Regarding Claims 19, 26, 29, 32, and 35 Dahl et al. discloses a computer system employing a read priority system so that read requests, even when received after write requests, are giving priority over the write requests (Column 2, lines 48-60) and executed prior to previously queued write requests. In receiving prioritized read request, they are executed at faster speeds than other request; therefore, they can be considered to be “read requests flits” or early read requests which are issued earlier than other requests causing previous write requests to wait for the execution of the read flit.

Regarding Claims 20, 25, 27, 30, and 36-37, Dahl et al. discloses dividing requests into sub-tasks that can be performed by individual corresponding registers for the completion of the entire request. Therefore, it is understood that upon the receipt of a prioritized read request, the system will start the read request by sending the first sub-task to the first corresponding register in order to speed up the operation (Column 3, lines 1-10). Since the read request is initiated as soon as it is received, if error checking were to take place, it would take place after the initiation of the read requests.

Regarding Claims 21 and 33, in receiving a request, an indication that is a read request serves as an indication for an early dispatch of the request since read requests are prioritized and must be executed as soon as they are received.

Regarding Claims 22, 28, 31, and 34 Dahl et al. discloses only prioritizing those read request that do not depend on a queued write request. Therefore, identification of these “early dispatch read not allowed” is additional indication as to whether the request can be dispatched early (Column 2, lines 48-59).

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Midys Inoa whose telephone number is (703) 305-7850. The examiner can normally be reached on M-F 7:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on (703) 306-2903. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Midys Inoa
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Examiner
Art Unit 2188

MI

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2/23/04

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